

### C. REMARKS/ARGUMENTS

Applicants respectfully request reconsideration of the outstanding rejections and reexamination of the present application in light of the following amendments and remarks.

#### *Status of the Claims*

Claims 1, 3, 8, 11, 13, 18, 21-23 and 25-28 are currently amended. Claims 4, 14, 24, 29 and 30 are canceled.

#### *Information Disclosure Statement*

The Office Action includes that the information disclosure statement filed November 20, 2003 fails to comply with 37 CFR 1.98(a)(2), which require a legible copy of each cited foreign patent document and each non-patent literature publication and thus the IDS has been placed in the application file, but the information referred to therein has not been considered. [Office Action, p. 2] In particular, the Office Action states that for items AE, AG and AH, the author's name is not included, for item AF, pages 46-49 are listed, but 6 pages were submitted, and for AJ, the publisher name is not consistent with what is submitted. Applicants submit a replacement information disclosure statement herewith complying with the requirements of 37 CFR 1.98(a)(2). Applicants respectfully request the Examiner consider the cited references.

#### *Interview Summary*

On April 30, 2007, Applicants' Representative, Amy Pattillo, conducted a telephone interview with Examiner Shan. No exhibits were shown nor demonstrations made. Applicants proposed amendments to claims 1, 21, and 29 to overcome the rejection of these claims under 35 USC 101. In particular, Applicants proposed amending claims 1 and 21 to clarify that the tangible result is outputting an indication of whether an electronic device is secure or not secure. The Examiner noted that an output indicating whether an electronic device is secure or not secure is a tangible result, however, that Applicants should note the support for the proposed amendment in

the specification. As noted below, Applicants have amended claims 1 and 21 to read on the specification and to teach a tangible result of an xray system indicating whether an electronic device is secure or not secure at a security checkpoint. In addition, as to claim 21, Applicants proposed an amendment of a computer program product stored on a volatile or non-volatile computer operable medium, where paragraph 0032 of the specification distinguishes between volatile and non-volatile computer operable mediums, which include RAM, ROM, floppy disks and other hardware, and transmission media, which may include light waves or other forms of energy. The Examiner noted if the specification supports the distinction then the proposed amendment would require additional approval by a supervisor.

In addition, as to claim 1, Applicants proposed amendments to claim 1 to overcome the rejection of this claim under 35 USC 103. The substance of the proposed amendments is included in the amendment of claim 1 as presented in the listing of claims herein. The Examiner indicated that if the proposed amendments are supported in the specification, the limitations would require additional search.

**35 USC 101**

The Office Action rejects claims 1-10 and 21-30 under 35 U.S.C. 101 as directed to non-statutory subject matter. [Office Action, p. 3] Claims 4, 14, 24, 29 and 30 are cancelled.

As to claims 1-3 and 5-10, the Office Action states that claims 1-10 are directed to a method for security screening of electronic devices. [Office Action, p. 3] The Office Action states that the claimed steps in claims 1-10 do not result in a tangible result and therefore are rejected "as being directed to an abstract idea (i.e. producing a non-tangible result) [tangible requirement does require that the claim must recite more than a 101 judicial exception, in that the process must set forth a practical application of that 101 judicial exception to produce a real-world result]". [Office Action, p. 3] Regardless of whether the rejection of claims 1-10 under 35 USC 101 is correct, Applicants amend claim 1, upon which claims 2, 3, and 5-10 depend, to clarify that the elements in claim 1

result in a tangible result of indicating by an xray system the security determination of secure or not secure for an electronic device at a security checkpoint. Applicants respectfully assert that the output of indicating by an xray system that an electronic device is either secure or not secure, responsive to comparing the information for the electronic device with real-time scanned characteristics of the electronic device, is a practical application of a method producing a real-world result by which a security system determines whether allow an electronic device though the checkpoint or provide an alert to an attendant to perform an additional check of the electronic device.

In particular, claim 1 is amended to teach the elements of responsive to said at least one real-time scanned characteristic matching said information, indicating by the xray system the electronic device is secure and responsive to said at least one real-time scanned characteristic not matching said information, indicating the electronic device is not secure and providing an alert by the xray system through an alert system to an attendant to hand check the electronic device. Applicants note that Figure 6 and paragraph 0063 of the specification describe an x-ray security controller within an xray system which "indicates the electronic device is secure" or "indicates the electronic device is not secure" and "an attendant is alerted to hand check the electronic device." In addition Figure 10B and paragraph 0080 of the present application describe a block 1014 which teaches a determination by the xray system whether the information for the device matches the current x-ray image (real-time scanned characteristic). Continuing in Figure 10B and paragraph 0080, responsive to the information for the device matching the current x-ray image at block 1014, the process performs block 1016, which describes the xray system indicating the device is secure. Further, continuing in Figure 10B and paragraph 0080, responsive to the information for the device not matching the current x-ray image at block 1014, the process performs block 1021, which describes the xray system providing an alert that the current x-ray image does not match the information for the device. More particularly, Figure 6 and paragraph 0064 of the present application describes that the xray system includes an alert lighting system which includes the actual mechanisms for alerting airport security personnel about the

security status of an electronic device. Therefore, the specification supports the amendments to claim 1 and no new matter is added to the application. In addition, the amendments to claim 1 clarify that the elements of claim 1 result in a tangible result and the rejection under 35 USC 101 should be removed. As to claims 2, 3, and 5-10, these claims are dependent upon claim 1 which is amended to clearly teach elements which result in a tangible result, and therefore as dependent claims of an allowable independent claim, also teach elements which result in a tangible result and should be allowed.

As to claims 21-23 and 25-28, the Office Action states that claims 21-28 are directed to a computer program product stored on a computer operable medium for security screening of electronic devices. [Office Action, p. 3] The Office Action asserts that the claimed subject matter does not fall within the statutory classes listed in 35 USC 101 for two reasons. [Office Action, p. 3] First, the Office Action states that the claimed computer program product stored on a computer operable medium does not result in a tangible result. Second, the Office Action states that the subject matter is not limited to a process, machine, manufacture, or a composition of matter because Applicants' specification, page 12, paragraph 0030, lines 9-10 is "acoustic, electromagnetic, or light waves," which includes a form of energy. [Office Action, pp. 3, 4] The Office Action states that energy does not fall within a statutory category since it is clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product or constitute a manufacture, and not a composition of two or more substances to constitute a composition of matter. [Office Action, p. 4]

As to the first issue that the claimed computer program product stored on a computer operable medium does not result in a tangible result, Applicants note that claim 21, upon which claims 22, 23, and 25-27 are dependent, is amended in a similar manner as claim 1, and further amended to clarify that the computer program product comprises instructions that when executed by a computer system cause the computer

system to perform the operations which produce a tangible result of "indicating that the electronic device is secured, responsive to the real-time scanned characteristic matching the information for the electronic device" or "indicating that the electronic device is not secure and providing an alert by the xray system through an alert system to an attendant to hand check the electronic device." Applicants respectfully assert that the computer program product with machine executable instructions which when executed results in the output of indicating that an electronic device is either secure or not secure, responsive to comparing the information for the electronic device with real-time scanned characteristics of the electronic device, is a practical application of a method producing a real-world result by which a security system determines whether allow an electronic device though the checkpoint or provide an alert to an attendant to perform an additional check of the electronic device.

In particular, Applicants note that the specification, paragraphs 0031 and 0032 as published, describes that the invention of the present application can be provided as machine executable instructions that when executed carry out the operations of Figure 10 and that a computer program product, included on a computer operable medium, may include the machine executable instructions to cause the computer system to perform the process of the invention. As previously noted, Figure 10B and paragraph 0080 of the present application teach a block 1014 which teaches a determination by the xray system whether the information for the device matches the current x-ray image (real-time scanned characteristic). Continuing in Figure 10B and paragraph 0080, responsive to the information for the device matching the current x-ray image at block 1014, the process performs block 1016, which describes the xray system indicating the device is secure. Further, continuing in Figure 10B and paragraph 0080, responsive to the information for the device not matching the current x-ray image at block 1014, the process performs block 1021, which describes the xray system providing an alert that the current x-ray image does not match the information for the device.

As to the second issue that the claimed computer program product is not limited to a process, machine, manufacture, or a composition of matter because Applicants'

specification describes a computer operable medium as including “acoustic, electromagnetic, or light waves”, Applicants note that claim 21, upon which claims 22-27 are dependent, is amended to limit the computer operable medium to a volatile or non-volatile computer operable medium, which does not include “acoustic, electromagnetic, or light waves.” In particular, Applicants note that paragraph 0032 of the application, as published, distinguishes that the computer operable medium may take many forms, including, but not limited to non-volatile media, volatile media, and transmission media. Volatile media and non-volatile media are described as floppy disks, hard disks, ROM, mass storage devices, and other physical memory devices. In contrast, the specification clearly distinguishes transmission media which can take the form of “acoustic, electromagnetic, or light waves”. By amending claim 21 to limit claim 21 to a volatile or non-volatile computer operable medium, Applicants respectfully assert that claim 21 does not include energy and therefore is limited to a program residing on a tangible medium including machine executable instructions which when executed on a computer system, cause the computer to perform the operations of the invention. Furthermore, by amending claim 21 to limit claim 21 to a volatile or non-volatile computer operable medium, Applicants respectfully assert that dependent claims 22, 23, and 25-28, are also properly limited as required under 35 USC 101.

***Currently Pending Claims not Obvious under 35 USC 103(a)***

The Office Action rejects claims 1-8, 10-18, 20-27, and 29-30 under 35 USC 103(a) as being obvious under McClelland et al. (US Patent 7,139,406) in view of Lee et al. (US Patent 6,650,240). [Office Action, p. 5] Applicants traverse the rejection of the claims in view of the amendments to the claims. Claims 4, 14, 24, 29 and 30 are cancelled.

**Claims 1, 11, and 21**

Claims 1, which is representative in subject matter and rejection to claims 11 (without the last 2 elements) and 21, reads:

1. (Currently Amended) A method for security screening of electronic devices, comprising:

detecting an identifier from an electronic device comprising a plurality of components through a radio frequency identifier reader, wherein said identifier specifies a manufacturer and a type of product for said electronic device;

detecting an additional identifier for an additional component of said electronic device which alters an original configuration of said plurality of components of said electronic device by said manufacturer;

querying a database with said identifier and said additional identifier for information about said electronic device and said additional component, wherein said database comprises information identifying for each separate identifier from among a plurality of unique identifiers of a plurality of electronic devices a separate original configuration and for each separate additional identifier from among a plurality of additional identifiers of a plurality of additional components a separate image; [[and]]

responsive to receiving said information about said electronic device and said additional component from said database, comparing at least one real-time scanned characteristic of said electronic device and said additional component with said information;[[.]]

wherein if responsive to said at least one real-time scanned characteristic matching [[and]] said information [[match]], indicating [[then]] by an xray system the electronic device is considered secure; and

responsive to said at least one real-time scanned characteristic not matching said information, indicating by said xray system said electronic device is not secure and providing an alert by said xray system through an alert system to an attendant to hand check said electronic device.

First, Applicants respectfully assert that as to the amendments to claims 1, 11, and 21, the specification of the present application teaches each of the amendments, therefore no new matter is added as a result of the amendments to the claims.

In particular, as to detecting an identifier from an electronic device comprising a plurality of components through a radio frequency identifier reader, wherein said identifier specifies a manufacturer and a type of product for said electronic device, the specification teaches an xray system 308 with an RFID (radio frequency identifier) reader 602 which read RFIDs from electronic devices, as described in paragraphs 0059, 0060, 0076 and Figure 10A. Paragraph 0049 of the specification describes that the data included in an RFID may indicate the manufacturer and type of product of the electronic device.

As to the element of detecting an additional identifier for an additional component of said electronic device which alters an original configuration of said plurality of components of said electronic device by said manufacturer, paragraph 0055 of the specification teaches that a user may alter the electronic device from its original configuration through the addition or adjustment of components and that the added component includes a separate RFID. Paragraph 0056 describes that the scanning system can detect multiple RFIDs in a single electronic device.

As to the element of querying a database with said identifier and said additional identifier for information about said electronic device and said additional component, wherein said database comprises information identifying for each separate identifier from among a plurality of unique identifiers of a plurality of electronic devices a separate original configuration and for each separate additional identifier from among a plurality of additional identifiers of a plurality of additional components a separate image, the specification teaches an xray system that queries a database with the identifier from the RFID for information about the electronic device in Figure 6, element 610 and Figure 10A, element 1006, and paragraphs 0060 and 0078. Paragraphs 0050-0052, 0055, 0056, and 0073 describe the database as identifying, for each RFID information about either an electronic device or an additional component, and, in particular, for an electronic device, identifying the component characteristics and overlay images of the original manufacturer configurations of electronic devices. Additionally, although not specified in the claims, for ease of examination, Applicants note the specification describes enabling the database to include the information for electronic devices and components in paragraphs 0044-0048, 0053, and 0055.

As to the element of responsive to receiving said information about said electronic device and said additional component from said database, comparing at least one real-time scanned characteristic of said electronic device and said additional component with said information, the specification in paragraph 0062 teaches an xray system with an xray security controller for scanning the xray image of an electronic device and comparing the scanned image with the information retrieved about the

electronic device. In particular, paragraph 0062 describes that the internal component locations of the electronic device are compared with retrieved internal component locations and the retrieved x-ray overlay in the information is compared with the current scan. In addition, paragraphs 0056, 0072-0075, and 0079 describe comparing the real-time scanned characteristic with the information for the electronic device and the additional component.

As previously noted, as to the elements of responsive to said at least one real-time scanned characteristic matching said information, indicating by an xray system, said electronic device is secure and responsive to said at least one real-time scanned characteristic not matching said information, indicating by said xray system said electronic device is not secure and providing an alert by said xray system through an alert system to an attendant to hand check said electronic device, the specification teaches these elements in paragraphs 0063, 0064, 0067, and 0080 and Figures 6 and 10B.

Second, Applicants respectfully assert that claims 1, 11, and 21 are not obvious under McClelland in view of Lee because there is no motivation or suggestion for modifying McClelland and modifying McClelland in view of Lee to teach each and every element of claims 1, 11, and 21. The Office Action states that McClelland does not "disclose expressly an item is an electronic device, information includes information about the item and comparing at least one real-time scanned characteristic of said item with said information, wherein if said at least one real-time scanned characteristic and said information match, then the item is considered secure." [Office Action, p. 6] The Office Action cites Lee as disclosing that "an item of baggage is an electronic device, such as a laptop computer, a mobile telephone, camera, and so forth in col. 1, lines 13-20." [Office Action, p. 6] In addition, the Office Action notes that McClelland describes that the system and methods may be used to "an inspection machine may be used to obtain an x-ray image of a component, and the component may include a unique identifier used to link the component to the x-ray image. A remote operator may examine the image, or an algorithm may be implemented to examine the image, to

detect whether the component has any defects" in col. 21, lines 20-37." [Office Action, p. 6] The Office Action continues with "Any electronic device is made of components. When a remote operator/algorithm examines the image, it would have been obvious to one with ordinary skill in the art to compare the scanned component with the specification/previous image/information of a non-defective component storing in a database. If match found then the component is good. In the case of an airport, the above step helps to decide whether this component of an electronic device is indeed a component of an electronic device and therefore to decide whether it is secure or not." [Office Action, pp. 6-7]

Applicants respectfully assert that regardless of whether McClelland could be modified to describe an inspection machine which could be used to scan an electronic device and examine the image to decide whether it is secure as asserted in the Office Action, neither McClelland nor the knowledge of one with skill in the art suggests modifying the database of McClelland, to include the original configuration images of the components of an electronic device and additional information for additional components within the electronic device which alter the original manufacturer configuration or modifying the RFID reader of McClelland to read and query the database for multiple RFIDs detected from a single electronic device, including the RFID of an add on component which alters the original manufactured configuration of the electronic device, for the purpose of comparing a real time scan of the electronic device with previous images from the database which include both the original manufacturing configuration and information about the additional component. In particular, McClelland describes one application of its system for detecting a single identifier for a single component and scanning a single component at manufacture. *McClelland*, col. 21, lines 20-37. Similarly, in the primary description of McClelland, a single identifier is affixed to luggage and a scan of the luggage is stored. Merely because McClelland describes an airport security screening method that includes comparing a current scan of luggage with a previously scanned image of the luggage accessed according to an identifier does not lead to modifying McClelland to read on

any invention, which within an airport or security screening context, includes scanning an item and comparing that scan to a previously scanned image of the item accessed according to identifier.

In particular to claims 1, 11, and 21, these claims describe a security screening system which compares the current scan of an electronic device with the previous scans of the original manufactured configuration of the electronic device and additional information about additional components added by a user to the electronic device which alter the original manufactured configuration of the components of the electronic device. Customers are prone to change memory, hard drives, network cards, and other components of an electronic device, altering the original configuration of the components of the electronic device. For a system which relies on a scan of the original configuration of an electronic device, there is a need fulfilled in claims 1, 11, and 21 for further efficient management of scans of electronic devices which include additional components which alter the original configuration of the electronic device. In view of the foregoing, there is no motivation for modifying McClelland's system which scans an item and compares the item to a previous scan of the item, even within a security context, even in view of Lee's system which describes detecting identifiers affixed to electronic devices, to teach each and every element of the amended limitations of claims 1, 11, and 21.

In addition, Applicants respectfully assert that claims 1, 11, and 21 are not obvious under McClelland in view of Lee because neither McClelland nor Lee, separately or in combination, teaches each and every element of claims 1, 11, and 21. In establishing a *prima facie* case of obviousness under 103(a), the combined prior art references must teach or suggest all the claim limitations. *In re Vaeck*, 947 F.3d 488, 20 USPQ2d 1438 (Fed Cir. 1991). Because McClelland and Lee, separately or in combination do not teach each and every element of claims 1, 11, and 21, a *prima facie* case of obviousness is not established and the claims should be allowed.

First, neither McClelland or Lee, separately or in combination, teaches or suggests querying a database with said identifier and said additional identifier for

information about said electronic device and said additional component, wherein said database comprises information identifying for each separate identifier from among a plurality of unique identifiers of a plurality of electronic devices a separate original configuration and for each separate additional identifier from among a plurality of additional identifiers of a plurality of additional components a separate image. In col. 20, lines 43-55, as cited in the Office Action, McClelland describes that an image file from an image scanned at the airport, a thread file, and passenger information can be accessed from a remote access server. Lee, col. 3, lines 1-5 describe a tracking means which either registers the items to be tracked or detects whether the item is present based on detecting the registered identifier. Neither McClelland nor Lee teaches or suggests a database that includes, for each unique identifier for a manufacturer and product, an original configuration of the electronic device and that includes, for each additional identifier for an add on component, information for that component. Moreover, merely because McClelland describes that its system could be applied in different applications, including non-destructive testing of components, does not teach or suggest modifying the database of test images scanned at an airport to teach the claimed invention of said database comprises information identifying for each separate identifier from among a plurality of unique identifiers of a plurality of electronic devices a separate original configuration and for each separate additional identifier from among a plurality of additional identifiers of a plurality of additional components a separate image.

Second, neither McClelland or Lee, separately or in combination, teaches or suggests detecting an additional identifier for an additional component of said electronic device which alters an original configuration of said plurality of components of said electronic device by said manufacturer because neither reference teaches an electronic device identifier which specifies a manufacturer and type of product of the electronic device. In McClelland col. 9, lines 6-11, as cited in the Office Action, McClelland describes that a scanned RFID can include a unique code, but does not teach an electronic device with an RFID that specifies the manufacturer of the device and type of

product of the electronic device. In addition, col. 20, lines 35-42 of McClelland describe that the unique identifier is unique in that it ties the passenger to their baggage, McClelland does not teach a unique identifier that identifies the originating manufacturer and type of product for the electronic device itself. Further, Lee describes in col. 1, lines 13-20, as cited in the Office Action, that an item of baggage is an electronic device and col. 2, lines 45-65 describe that a user can affix a tag to a device and select an identifier for the tag. Neither McClelland or Lee, however, teaches an RFID for an electronic device which identifies a manufacturer and product type so that the identifier can be used to query a database of multiple identifiers, from multiple manufacturers, for multiple products, to access the original configuration in component schematics or image overlays by each manufacturer for each separate electronic device. Therefore, because McClelland or Lee, separately or in combination, do not teach or suggest at least one element of detecting an additional identifier for an additional component of said electronic device which alters an original configuration of said electronic device by said manufacturer, claims 1, 11, and 21 are not obvious under McClelland and Lee.

Claims 2, 3, 5-8, 10, 12, 13, 15-18, 20, and 22, 23, 25-27

As to claims 2, 3, 5-8, 10, 12, 13, 15-18, 20, 22, 23, and 25-27, Applicants respectfully assert that because these claims depend upon claims 1, 11, and 21, which are amended for allowance, claims 2, 3, 5-8, 10, 12, 13, 15-18, 20, 22, 23, and 25-27 are also allowable as dependent claims of allowable independent claims. Applicants note that claims 22, 23, and 25-27 are amended to maintain antecedent basis in view of the amendments to claim 21.

In addition, with respect to claims 3, 13, and 23, Applicants note that the claims are amended to teach querying said database with said identifier for said information comprising physical weights of said electronic device. Paragraphs 0051 and 0062 teach querying a database with the identifier for the information including physical weights of electronic devices, which can then be compared with density signature xray scans of the components of the electronic device collected by the xray imaging system.

Therefore, because the specification teaches the amended element of claims 3, 13, and 23, no new matter is added through the amendment to the claims.

Further, with respect to claims 8 and 18, Applicants respectfully assert that McClelland and Lee, separately or in combination, do not teach or suggest each and every element of these claims. Claim 8, which is representative in subject matter and rejection of claims 18, reads:

Claim 8 (Currently Amended): The method of claim 1 for security screening further comprising:  
~~detecting a second identifier for a component of said electronic device; and~~  
~~querying said database with said second identifier for second information about said component;~~  
~~responsive to receiving a particular image for said additional identifier~~ said second information about for said additional component from said database layered with a particular original configuration said information for said electronic device~~[,]~~ for comparing at least one real-time scanned characteristic of said electronic device and said additional component with said layered information; and  
~~responsive to receiving said second information about said component from said database separate from said information for said electronic device, comparing at least one real-time scanned characteristic of said component with said second information for said component.~~

Applicants note that paragraphs 0056, 0073, 0074, 0075 and 0079 teach the image for the additional component layered on the original configuration of the electronic device. Therefore, no new matter is added through the amendments to the claims.

The Office Action cites McClelland, col. 21, lines 20-37 as reading on these elements of claims 8 and 18. [Office Action, pp. 9-10] Col. 21, lines 20-32 of McClelland describes that McClelland's system could be applied to scanning a component and then running an algorithm to examine the image and determine if the component has any defects. McClelland, however, does not teach or suggest layering an image of an additional component which alters the original configuration of an electronic device over the image of the original configuration of that electronic device. Therefore, because McClelland and Lee, separately or in combination do not teach or suggest at least one

of the elements of claims 8 and 18, claims 8 and 18 are not obvious under McClelland and Lee and should be allowed.

***Conclusion***

Applicants have amended the claims to clearly overcome the rejections under 35 USC 101 and 35 USC 103(a). In view of the foregoing, withdrawal of the rejections and the allowance of the current pending claims are respectfully requested. If the Examiner feels that the pending claims could be allowed with minor changes, the Examiner is invited to telephone the undersigned to discuss an Examiner's Amendment.

No extension of time is believed to be necessary. If, however, an extension of time is required, the undersigned hereby authorizes the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0447.

Respectfully submitted,  
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